

PATENT CASE IN0291K2GQ1B1C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

BISHOP ET AL.

For Patent For: TRICYCLIC AMIDE AND UREA COMPOUNDS USEFUL FOR INHIBITION OF G-PROTEIN FUNCTION AND FOR TREATMENT OF

PROLIFERATIVE DISEASES

Serial No.: 10/026,751

Filed: December 20, 2001

Examiner: To be assigned

Group: 1624

Date: October 4, 2002

TECH CENTER 1600/2900

Schering-Plough Corporation Kenilworth, New Jersey 07033-0530

Commissioner for Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Submitted herewith is Applicants' PTO Form 1449. Applicants request that the cited references be made of record in the above-identified Application.

Since no action on the merits has been received as of this mailing, no fee is deemed due for this submission. However, if it is determined that a fee is due, then authorization to change such fee to our Deposit Account No. 19-0365 is hereby given.

Copies of references AK, AL, AO, AP, AQ, BL, BM, BN, BO, BP, BQ, BR, BS, BU, BV are submitted herewith.

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231 ON

October 4, 2002

(DATE OF DEPOSIT)

HENRY C. JEANETTE REG. NO. 30,856 (REGISTERED REPRESENTATIVE)

asy C. Jesuette October 4, 2002 (SIGNATURE AND DATE) Copies of the remaining references are not submitted herewith in view of Applicants' submission in parent Application Serial No. 9,350,870. The Examiner is requested to notify the undersigned if another copy of these references is desired.

U.S. 5,393,890, cited on the 1449 form, is directed to compounds of the formula:

wherein R can be H, chloro or methoxy; Y can be, amongst others, -CH=CH-, -CH₂CH₂-, -OCH₂, and -SCH₂-; A can be, amongst others, pyridine (see column 2 at about line27); X can be, amongst others, -CO- or -SO₂-; and Q can be, amongst others, phenyl, piperidinyl or thienyl.

WO88/03138, cited on the 1449 form, discloses compounds of the formula:

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{6}
 R^{8}
 R^{8}

wherein: one of a, b, c, and d can be N; X can be C or N; Z can be O or S; and R can be, amongst others, an alkyl group which alkyl group can be substituted with, amongst others, aryl, $-N(R^{10})_2$ (wherein R^{10} can be H), $-OR^{12}$ (wherein R^{12} can be H), or a group D which D group can be, amongst others, the substituent

U.S. 5,089,496, cited on the 1449 form, discloses compounds of the formula:

wherein R can be alkyl substituted with with a heterocyclic N-oxide group of the formula

wherein Y represents N⁺-O⁻. R can also be alkyl substituted with -OR¹² or - $N(R^{10})_2$ wherein R^{12} and R^{10} can be H. (See Column 3 at about lines 37 to about 43).

U.S. 5,089,496, in Column 74, discloses the compounds:

wherein the substituents can be, for example:

R ³	R ⁴	R	Z
-CI	-H	-CH ₂ OC ₂ H ₅	0
-CI	-H	-CH(CH ₃))CH ₃	0
-CI	-H	-C(O)CH3	0
-H	-CI	-CH ₂ OCH ₃	0
-CH ₃	-H	-CH ₂ OCH ₃	0
-H	-H	-CH ₂ OCH ₃	0
-F	-H	-CH ₂ OCH ₃	0
-CI	-H	-CH(OH)CH3	0

(see also Column 76 wherein, for example, R^3 is -Cl, R^4 is -H, Z is O and R is -CH₂CH=CH₂ or C(CH₃)₂OCH₃).

U.S. 5,089,496 also discloses the compounds:

in Example 9 in Column 84.

U.S. 5,089,496 also discloses the compound:

at the top of Column 86.

In Column 93 (the 2nd, 3rd and 4th values for R), U.S. 5,089,496 further discloses the compounds:

wherein R can be:

In addition, Claim 1 of U.S. 5,089,496 is directed to compounds of the formula:

$$R^1$$
 C
 R^2
 C
 R^3
 R^4
 R^6
 R^8
 R^8

wherein: one of a, b, c, and d can be N; Z can be O or S; and R can be, amongst others, an alkyl group which alkyl group can be substituted with, amongst others, aryl, $-N(R^{10})_2$ (wherein R^{10} can be H), $-OR^{12}$ (wherein R^{12} can be H), or a group D which D group can be, amongst others, the substituent

2-, 3- or 4-piperidinyl, or 2- or 3-piperazinyl.

It is believed that Example 20 (column 95) of U.S. 5,089,496 discloses the compounds:

Claim 3 (Column 100) of U.S. 5,089,496, is directed to compounds of Claim 1 wherein R can be, amongst others, alkyl substituted with OR^{12} or $-N(R^{10})_2$.

EP 0 495 484, cited on the 1449 form discloses compounds of the formula:

wherein R¹ represents a cyano, carbamoyl, alkylsulfoxy, alkylsulfonyl, tetrazolyl or sulfonic acid group; and R² represents a hydrogen atom, a cyano, phenyl, aralkyl, alkoxycarbonylalkyl, aminoalkylcarbamoylalkyl or lower alkyl group or a group

or X-R⁴, X being an oxygen or sulfur atom, R³ standing for a hydrogen atom or a substituted or unsubstituted lower alkyl, phenyl or aralkyl group, and R⁴ being a substituted or unsubstituted lower alkyl, phenyl or aralkyl group or an aminoalkyl group.

Respectfully submitted,

Henry C. Jeanette Reg. No. 30,856

Attorney for Applicants

(908) 298-5041

HCJ: ama Enclosures

Sheet <u>1</u> of <u>2</u>

FORM PTO-144 TRADENA U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

ATTY, DOCKET NO.: SERIAL NO.: IN0291K2GQ1B1C 10/026,751 APPLICANT:

BISHOP et al.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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A		5,104,876	4/92	Piwinski et al.				<u> </u>	<u></u>	
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	AH	5,151,423	9/92	Piwinski et al.			LONOL	. VILI	1000/2	
Al		5,393,890	2/28	Masataka Syoji et al.			3			
	AJ	5,665,726	9/97	Piwinsk						
	<u>AK</u>	5,672,611	9/97	Doll et a	al		514	325		
	ÆL_	5,684,013	11/97	Afonso	et al.		514	290		
	AM	5,696,121	12/97	Bishop	et al.					
	AN	5,700,806	12/97	Doll et a	al.					
V	ΆO	5,703,090	12/97	Afonso	et al.		514	290	<u> </u>	
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		Proc. Natl. Acad. Sci. USA, 87, 3042-3046 (1990).								
	BD									
		Proc. Natl. Acad. Sci. USA, 87, 7541-7545 (1990).								
	BF									
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		Proc. Natl. Acad. Sc		7926-792	9 (1990).					
	ВІ	<u>Cell, 62, 81-88 (199</u>								
	BJ	Biochemistry, 31, 38	300-3807.							
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line

through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OCT 0 8 2002 FORM PTO-1440 US. DEPARTMENT OF COMMERCE SERIAL NO.: ATTY, DOCKET NO .: TENT AND TRADEMARK OFFICE IN0291K2GQ1B1C 10/026,751 INFORMATION BISCLOSURE STATEMENT APPLICANT: BISHOP et al. BY APPLICANT FILING DATE: GROUP: (Use several sheets if necessary) December 20, 2001 1624 U.S. PATENT DOCUMENTS EXAMINER DOCUMENT DATE NAME CLASS SUB-FILING DATE IF INITIAL NUMBER CLASS APPROPRIATE 5,719,148 BK 2/98 Bishop et al. **UBL** 5,721,236 2/98 Bishop et al. 574 255 RECEIVED BM 5,728,703 3/98 Bishop et al. 514 BN 5,801,175 9/98 Afonso et al. 514 228. 20CT 1 1 2002 BO 5,807,852 9/98 Doll et al. 514 √BP 5,807,853 9/98 Bishop et al. 514 BQ 5,874,442 TECH CENTER 1600/2900 2/99 Doll et al. 290 **JBR** | 5,880,128 3/99 Doll et al. 514 BS 5,891,872 4/99 Doll et al. 220 514 BT 6,075,025 6/00 Bishop WBU 6,143,758 514 11/00 Doll et al. 290 √BV 6,214,828 B1 4/01 Doll et al. 514 253.03 FOREIGN PATENT DOCUMENTS DOCUMENT COUNTRY DATE CLASS SUB-TRANSLATION NUMBER CLASS YES NO BW WO92/11034 7/92 WIPO BX WO94/04561 3/94 WIPO BY WO94/24107 10/94 WIPO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) BZ Science, 260, 1934-1937. CA | Science, 260, 1937-1942. CB Piwinski, et al., <u>J. Med. Chem.</u>, <u>34</u>, (1) 457-461 (1991). CC Chem. Abstracts No. 121:53129x91994 for WO94/04561, BROWN et al, CD Masci, J. Chem. Soc., Chem. Commun., 1262-1263 (1982). CE Masci B. <u>Tetrahedron</u> 45, (9), 2719-2730 (1989). Sebti, et al., Proc. Ann. Meeting AM Assoc. Cancer Res., 33;A2217 (1992). CG Villani, et al., <u>J. Med. Chem.</u>, <u>15</u>, (7) 750-754 (1972). √CH | Billah, et al., <u>Lipids</u>, <u>26</u>, (12) 1172-1174 91991). Villani, et al., Arzneim. -Forsh/Drug Res., 36 (11), 1311-1314 (1986) -CI EXAMINER DATE CONSIDERED *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.